

## CLIMATOLOGICAL TABLES

## DESCRIPTION OF TABLES AND CHARTS

Table 1 gives the data ordinarily needed for climatological studies for about 176 Weather Bureau stations making simultaneous observations at 8 a. m. and 8 p. m. daily, seventy-fifth meridian time, and for about 37 others making only one observation. In addition, data appear for Juneau, Alaska, and Honolulu, Hawaii, where the observations are made at 8 a. m. and 8 p. m. of the time in local use. The altitudes of the instruments above ground are also given.

Table 2 gives, for about 35 stations of the Canadian Meteorological Service, the means of pressure and temperature, extremes of temperature, total precipitation, and depth of snowfall, and the respective departures from normal values except in the case of snowfall. The sea-level pressures have been computed according to the method described by Prof. F. H. Bigelow in the REVIEW of January, 1902, pages 13-16.

Chart I.—*Tracks of centers of ANTICYCLONES*; and

Chart II.—*Tracks of centers of CYCLONES*. The roman numerals show the chronological order of the centers. The figures within the circles show the day of the month, with A or P to designate whether the 8 a. m. or 8 p. m., seventy-fifth meridian time observation, and on Chart I the last three figures of the highest, and on Chart II of the lowest barometric reading at or near the center at the time, always reduced to sea level and standard gravity. The inset map in Chart I shows the departure of monthly mean pressure from normal and the inset in Chart II shows the change in mean pressure from the preceding month.

Chart III.—*Temperature departures*. This chart presents the departures of the monthly mean surface temperatures from the monthly normals. The shaded portions of the chart indicate areas of positive departures and unshaded portions areas of negative departures. Generalized lines connect places having approximately equal departures of like sign. This chart of monthly surface temperature departures in the United States was first published in the MONTHLY WEATHER REVIEW for July, 1909. Similar charts back to January, 1873, appear in Bulletin U, W. B.

Chart IV.—*Total precipitation*. The scales of shading with appropriate lines show the distribution of the

monthly precipitation, based on the reports from regular and selected cooperative observers. The inset on this chart shows the departure of the monthly totals from the corresponding normals.

Chart V.—*Percentage of clear sky between sunrise and sunset*. The average cloudiness at each regular Weather Bureau station is determined by numerous personal observations between sunrise and sunset. The difference between the average percentage of cloudiness and 100 is assumed to represent the percentage of clear sky, and the values thus obtained are the basis of this chart. The chart does not relate to the nighttime.

Chart VI.—*Isobars at sea level, average surface temperatures, and prevailing wind directions*. The pressures have been reduced to sea level and standard gravity by the method described by Prof. Frank H. Bigelow on pages 13-16 of the REVIEW for January, 1902. They have also been reduced to the mean of 24 hours by the application of a suitable correction to the mean of 8 a. m. and 8 p. m. readings at stations taking two observations daily, and to the 8 a. m. or the 8 p. m. readings, respectively, at stations taking but a single observation. The corrections so applied will be found in the Annual Report of the Chief of Weather Bureau, 1900-1901, volume 2, Table 27, pages 140-164.

The sea-level temperatures are now omitted and average surface temperatures substituted. The isotherms can not be drawn in such detail as might be desired, for data from only the regular Weather Bureau stations are used.

The prevailing wind directions are determined from hourly observations at the great majority of the stations. A few stations determine the prevailing direction from the daily or twice-daily observations only.

Chart VII.—*Total snowfall*. This is based on the reports from regular and cooperative observers and shows the depth in inches of the snowfall during the month. In general, the depth is shown by lines inclosing areas of equal snowfall, but in special cases figures are also given. This chart is published only when the snowfall is sufficiently extensive to justify its preparation. The inset to this chart shows the depth of snow on the ground at the end of the month.

Charts VIII, IX, etc.—*North Atlantic weather maps of particular days*.